

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Brown, et al.
Appl. No.: 09/159,518
Filed: September 24, 1998
For: **Novel Opioid Peptides for the Treatment of Pain**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

**Declaration by Joint Inventors (37 C.F.R. § 1.63) and on Behalf of Inventor
Who Refuses to Sign or Cannot Be Reached (37 C.F.R. § 1.47(a)),
Power of Attorney and Petition Under 37 C.F.R. § 1.47(a)**

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, and

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the application identified above.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with 37 C.F.R. § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119, of any United States provisional applications or foreign application(s) for patent or inventor's certificate or of any PCT International Application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application for patent or inventor's certificate or any PCT International Application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application on which priority is claimed:

fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint Robert A. Armitage, Reg. No. 27,417; Steven R. Borgman, Reg. No. 33,160; W. Scott Brown, Reg. No. 32,968; Barry Bumgardner, Reg. No. 38,397; Andrew G. DiNovo, Reg. No. 40,115; G. Harvey Dunn III, Reg. No. 31,102; Barry E. Engel, Reg. No. 37,127; A.H. Evans, Reg. No. 22,032; Adam Floyd, Reg. No. 39,192; William L. LaFuze; Stuart J. Ford, Reg. No. 37,486; Reg. No. 27,205; J. Clark Martin, Reg. No. 26,198; Gerald D. Malpass, Jr., Reg. No. 40.079; Peter E. Mims, Reg. No. 32,429; Minh-Hien Nguyen, Reg. No. 37,294; Gregory L. Porter, Reg. No. 40,131; W. Ronald Robins, Reg. No. 26,222; Michael A. Sanzo, Reg. No. 36,912; Willem G. Schuurman, Reg. No. 29,998; David B. Weaver, Reg. No. 43,244; and Karen Tucker White, Reg. No. 34,267, all registered to practice before the Patent and Trademark Office as my attorneys with full power of substitution and revocation to prosecute this application and all divisions and continuations thereof and to transact all business in the Patent and Trademark Office connected therewith and request that all correspondence and telephone communications be directed to the following person(s) at the mailing address and telephone number hereafter given:

Name : Michael A. Sanzo
Registration No. : 36,912
Address : Vinson & Elkins
2300 First City Tower
1001 Fannin
Houston, TX 77002-6760
Telephone No. : (202) 639-6585

I hereby petition that this declaration be accepted on my behalf and on behalf of the inventor who refuses to sign or cannot be reached, in accordance with 37 C.F.R. § 1.47(a).

Accompanying this declaration and petition are:

1. The petition fee of \$130.00 (37 C.F.R. § 1.17(i)) in accordance with the requirements of 37 C.F.R. § 1.47(a); and
2. Declaration(s) of pertinent facts in support of filing on behalf of an inventor who refuses to sign or cannot be reached.

Deceased - See attached signatures of co-executors

Signature of Inventor René Martel

Date

Last Residence: 1150, Cote Vertu, App. 301
Saint Laurent, Quebec H4L 1Y5, Canada

Last Citizenship: Canada

Last Post Office Address: 1150, Cote Vertu, App. 301
Saint Laurent, Quebec H4L 1Y5, Canada

Signature of Inventor Wuyi Wang

Date

Residence: 2297 Frenette
St-Laurent, Quebec H4R 1M3, Canada

Citizenship: Canada

Post Office Address: 2297 Frenette
St-Laurent, Quebec H4R 1M3, Canada

Co-Executors of Estate of Deceased Inventor René Martel

I hereby declare that my residence and citizenship are as stated below next to my name and that I am executing and signing this Declaration as co-executor of the estate of:

Full name of deceased inventor: René Martel

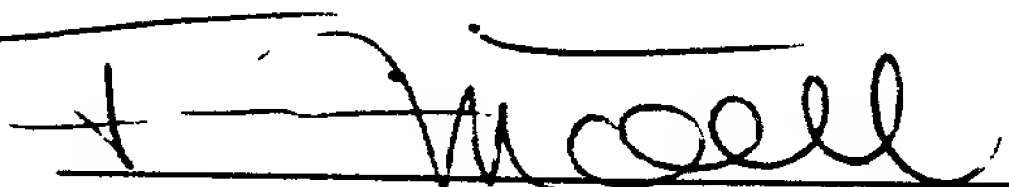
Country of citizenship of deceased inventor: Canada

Last residence of deceased inventor: 1150, Cote Vertu, App. 301
Saint Laurent, Quebec H4L 1Y5, Canada

Last post office address of deceased inventor: 1150, Cote Vertu, App. 301
Saint Laurent, Quebec H4L 1Y5,
Canada

Upon information and belief, I aver those facts which the inventor is required to state and which are set forth in the accompanying Declaration.

I also hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



Signature of co-executor Francis Martel

13-05-99
Date

Residence: 29A Rang St-André
St-Philippe, Québec
Canada J0L 2K0

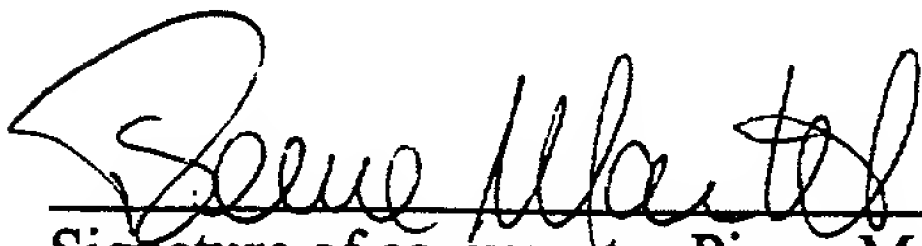
Citizenship: Canadian

Signature of co-executor Diane Martel


Date

Residence: 760 Marie LeBer, Apt. 108
Ile des Soeurs, Québec
Canada H3E 1W6

Citizenship: Canadian



Signature of co-executor Pierre Martel



Date

Residence: 109 Maitland
Pointe-Claire, Québec
Canada H9R 3X5

Citizenship: Canadian

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Power of Attorney and Petition Under 37 C.F.R. § 1.47(a)**

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, and

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the application identified above.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.

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I hereby claim foreign priority benefits under Title 35, United States Code, Section 119, of any United States provisional applications or foreign application(s) for patent or inventor's certificate or of any PCT International Application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application for patent or inventor's certificate or any PCT International Application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application on which priority is claimed:

<u>Application Serial No.</u>	<u>Country</u>	<u>Filing Date (Day/Month/Year)</u>	<u>Priority Claimed (Yes/No)</u>
9403263.8	United Kingdom	21 February 1994	Yes
9408179.1	United Kingdom	25 April 1994	Yes
9401519-5	Sweden	3 May 1994	Yes
9502877-5	Sweden	18 August 1995	Yes
9503924-4	Sweden	7 November 1995	Yes

I hereby claim the benefit under Title 35, United States Code, Section 120, of any United States application(s) or PCT International Application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application(s) in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56, which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<u>Application Serial No.</u>	<u>Filing Date</u>	<u>Status (Patented, Pending, Abandoned)</u>
PCT/SE95/00158	15 February 1995	Abandoned
PCT/SE96/01011	14 August 1996	Abandoned
08/392,918	March 3, 1995	Pending
08/718,585	October 2, 1996	Pending

I am signing this declaration on my own behalf and also under 37 C.F.R. § 1.47(a) on behalf of the joint inventor who refuses to sign or cannot be reached and for whom the following particulars are believed by me to be true:

Full name of inventor: John DiMaio

Last known residence: 12404 Pierre Blanchet
Montreal, Quebec H1E 4L9, Canada Citizenship: Canadian

Last known post office address: 12404 Pierre Blanchet
Montreal, Quebec H1E 4L9, Canada

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by

fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint Robert A. Armitage, Reg. No. 27,417; Steven R. Borgman, Reg. No. 33,160; W. Scott Brown, Reg. No. 32,968; Barry Bumgardner, Reg. No. 38,397; Andrew G. DiNovo, Reg. No. 40,115; G. Harvey Dunn III, Reg. No. 31,102; Barry E. Engel, Reg. No. 37,127; A.H. Evans, Reg. No. 22,032; Adam Floyd, Reg. No. 39,192; William L. LaFuze; Stuart J. Ford, Reg. No. 37,486; Reg. No. 27,205; J. Clark Martin, Reg. No. 26,198; Gerald D. Malpass, Jr., Reg. No. 40,079; Peter E. Mims, Reg. No. 32,429; Minh-Hien Nguyen, Reg. No. 37,294; Gregory L. Porter, Reg. No. 40,131; W. Ronald Robins, Reg. No. 26,222; Michael A. Sanzo, Reg. No. 36,912; Willem G. Schuurman, Reg. No. 29,998; David B. Weaver, Reg. No. 43,244; and Karen Tucker White, Reg. No. 34,267, all registered to practice before the Patent and Trademark Office as my attorneys with full power of substitution and revocation to prosecute this application and all divisions and continuations thereof and to transact all business in the Patent and Trademark Office connected therewith and request that all correspondence and telephone communications be directed to the following person(s) at the mailing address and telephone number hereafter given:

Name : Michael A. Sanzo
Registration No. : 36,912
Address : Vinson & Elkins
2300 First City Tower
1001 Fannin
Houston, TX 77002-6760
Telephone No. : (202) 639-6585

I hereby petition that this declaration be accepted on my behalf and on behalf of the inventor who refuses to sign or cannot be reached, in accordance with 37 C.F.R. § 1.47(a).

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1. The petition fee of \$130.00 (37 C.F.R. § 1.17(i)) in accordance with the requirements of 37 C.F.R. § 1.47(a); and
2. Declaration(s) of pertinent facts in support of filing on behalf of an inventor who refuses to sign or cannot be reached.

Signature of Inventor William Brown

Date

Residence: 756 Pierre Street
Ste-Dorothée, Laval, Quebec H7X 3L8, Canada

Citizenship: Canadian

Post Office Address: 756 Pierre Street
Ste-Dorothée, Laval, Quebec H7X 3L8, Canada

Signature of Inventor John DiMaio

Date

Residence: 12404 Pierre Blanchet
Montreal, Quebec H1E 4L9, Canada

Citizenship: Canadian

Post Office Address: 12404 Pierre Blanchet
Montreal, Quebec H1E 4L9, Canada

Signature of Inventor Peter Schiller

Date

Residence: 3475 Mountain Street, App. 1212
Montreal, Quebec H3G 2A4, Canada

Citizenship: Canada and Switzerland

Post Office Address: 3475 Mountain Street, App. 1212
Montreal, Quebec H3G 2A4, Canada

Deceased - See attached signatures of co-executors

Signature of Inventor René Martel

_____ Date

Last Residence: 1150, Cote Vertu, App. 301
Saint Laurent, Quebec H4L 1Y5, Canada

Last Citizenship: Canada

Last Post Office Address: 1150, Cote Vertu, App. 301
Saint Laurent, Quebec H4L 1Y5, Canada

_____ Signature of Inventor Wuyi Wang

_____ Date

Residence: 2297 Frenette
St-Laurent, Quebec H4R 1M3, Canada

Citizenship: Canada

Post Office Address: 2297 Frenette
St-Laurent, Quebec H4R 1M3, Canada

Co-Executors of Estate of Deceased Inventor René Martel

I hereby declare that my residence and citizenship are as stated below next to my name and that I am executing and signing this Declaration as co-executor of the estate of:

Full name of deceased inventor: René Martel

Country of citizenship of deceased inventor: Canada

Last residence of deceased inventor: 1150, Cote Vertu, App. 301
Saint Laurent, Quebec H4L 1Y5, Canada

Last post office address of deceased inventor: 1150, Cote Vertu, App. 301
Saint Laurent, Quebec H4L 1Y5,
Canada

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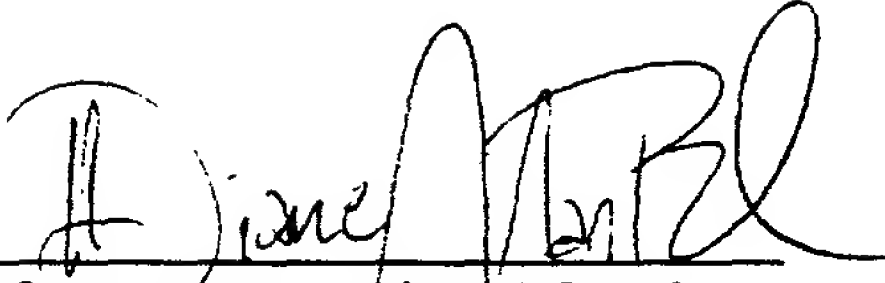
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Signature of co-executor Francis Martel

Date

Residence: 29A Rang St-André
St-Philippe, Québec
Canada J0L 2K0

Citizenship: Canadian



Signature of co-executor Diane Martel

24/05/99

Date

Residence: 760 Marie LeBer, Apt. 108
Ile des Soeurs, Québec
Canada H3E 1W6

Citizenship: Canadian

Signature of co-executor Pierre Martel

Date

Residence: 109 Maitland
Pointe-Claire, Québec
Canada H9R 3X5

Citizenship: Canadian

Brown, et al.
Atty. Dkt. No. ABA300/13004

<u>Application Serial No.</u>	<u>Country</u>	<u>Filing Date (Day/Month/Year)</u>	<u>Priority Claimed (Yes/No)</u>
9403263.8	United Kingdom	21 February 1994	Yes
9408179.1	United Kingdom	25 April 1994	Yes
9401519-5	Sweden	3 May 1994	Yes
9502877-5	Sweden	18 August 1995	Yes
9503924-4	Sweden	7 November 1995	Yes

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PCT/SE96/01011	14 August 1996	Abandoned
08/392,918	March 3, 1995	Pending
08/718,585	October 2, 1996	Pending

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Full name of inventor: John DiMaio

Last known residence: 12404 Pierre Blanchet
Montreal, Quebec H1E 4L9, Canada
Citizenship: Canadian

Last known post office address: 12404 Pierre Blanchet
Montreal, Quebec H1E 4L9, Canada

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by

Brown, et al.
Atty. Dkt. No. ABA300/13004



Signature of Inventor William Brown

June 1, 1999

Date

Residence: 756 Pierre Street
Ste-Dorothée, Laval, Quebec H7X 3L8, Canada
Citizenship: Canadian

Post Office Address: 756 Pierre Street
Ste-Dorothée, Laval, Quebec H7X 3L8, Canada

Signature of Inventor John DiMaio

Date

Residence: 12404 Pierre Blanchet
Montreal, Quebec H1E 4L9, Canada
Citizenship: Canadian

Post Office Address: 12404 Pierre Blanchet
Montreal, Quebec H1E 4L9, Canada



Signature of Inventor Peter Schiller

June 1, 1999

Date

Residence: 3475 Mountain Street, App. 1212
Montreal, Quebec H3G 2A4, Canada
Citizenship: Canada and Switzerland

Post Office Address: 3475 Mountain Street, App. 1212
Montreal, Quebec H3G 2A4, Canada

Brown, et al.
Atty. Dkt. No. ABA300/13004

Deceased - See attached signatures of co-executors

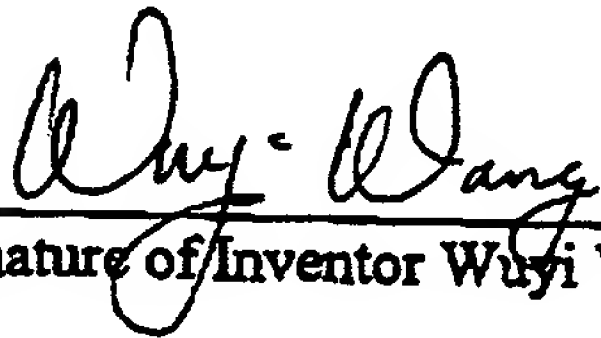
Signature of Inventor René Martel

_____ Date

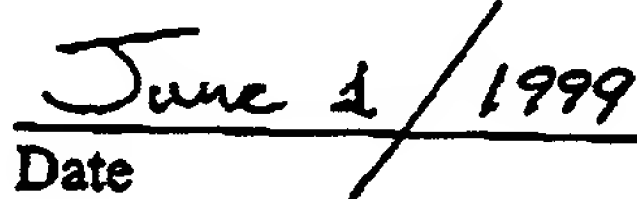
Last Residence: 1150, Cote Vertu, App. 301
Saint Laurent, Quebec H4L 1Y5, Canada

Last Citizenship: Canada

Last Post Office Address: 1150, Cote Vertu, App. 301
Saint Laurent, Quebec H4L 1Y5, Canada



Signature of Inventor Wuyi Wang


_____ Date

Residence: 2297 Frenette
St-Laurent, Quebec H4R 1M3, Canada

Citizenship: Canada

Post Office Address: 2297 Frenette
St-Laurent, Quebec H4R 1M3, Canada

Brown, et al.
Atty. Dkt. No. ABA300/13004

Co-Executors of Estate of Deceased Inventor René Martel

I hereby declare that my residence and citizenship are as stated below next to my name and that I am executing and signing this Declaration as co-executor of the estate of:

Full name of deceased inventor: René Martel

Country of citizenship of deceased inventor: Canada

Last residence of deceased inventor: 1150, Cote Vertu, App. 301
Saint Laurent, Quebec H4L 1Y5, Canada

Last post office address of deceased inventor: 1150, Cote Vertu, App. 301
Saint Laurent, Quebec H4L 1Y5,
Canada

Upon information and belief, I aver those facts which the inventor is required to state and which are set forth in the accompanying Declaration.

I also hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Signature of co-executor Francis Martel

Date

Residence: 29A Rang St-André
St-Philippe, Québec
Canada J0L 2K0

Citizenship: Canadian

Brown, et al.
Atty. Dkt. No. ABA300/13004

Signature of co-executor Diane Martel

Date

Residence: 760 Marie LeBer, Apt. 108
Ile des Soeurs, Québec
Canada H3E 1W6

Citizenship: Canadian

Signature of co-executor Pierre Martel

Date

Residence: 109 Maitland
Pointe-Claire, Québec
Canada H9R 3X5

Citizenship: Canadian

ASSIGNMENT TO ASTRA AB

Title: **NOVEL OPIOID PEPTIDES FOR THE TREATMENT OF PAIN AND USE THEREOF**
 Inventors: **William Brown, John DiMaio, Peter Schiller and René Martel**
 Serial No.: _____ Filing Date: _____
 Execution Date of Application: _____
 Docket No.: **ABA/300/58000** Country: _____

As a below-named inventor, I hereby declare that:

My post office address is as stated below under my signature and I am named as inventor of the inventions or discoveries (herein INVENTIONS) as described in the patent application (herein APPLICATION) identified above. In view of valuable consideration, receipt thereof is hereby acknowledged, I do hereby assign and transfer unto ASTRA AB, a corporation of Sweden having a place of business at Södertälje, its successors and assigns, my entire interest in and the full and exclusive right to the INVENTIONS, the APPLICATION and all related applications (including all divisions, reissues, continuations, and extensions thereof) and all counterparts in other countries, and any and all Letters Patent (and certificates of invention or similar certificates) (herein PATENTS) which may be granted based upon the INVENTIONS or the APPLICATION or related applications or counterparts in other countries; said transfer and assignment being applicable throughout the world. I hereby authorize and request officials of patent offices in any and all countries of the world to issue any and all of the PATENTS, when granted, to ASTRA AB, its successors and assigns, as the assignee of my entire right, title, and interest in and to the same. I agree that I will communicate to ASTRA AB, or its representatives, any facts known to me respecting the invention; testify in any legal proceedings; sign all lawful papers; execute all divisional, continuation, substitution, renewal, and reissue applications; execute all necessary assignment papers to cause any and all of the PATENTS to be issued to ASTRA AB; make all rightful oaths; and generally do everything possible to aid ASTRA AB, its successors and assigns, to obtain and enforce proper protection for the INVENTION in any and all countries throughout the world.

FOR OFFICIAL USE ONLY

FULL NAME OF FIRST/SOLE INVENTOR: **William Brown**
 Signature of Inventor: _____
 Address: **756 St-Pierre Street, Ste-Dorothée, Laval, Quebec H7X 3L8, Canada**
 Date: **Feb 3/95**

FULL NAME OF SECOND/JOINT INVENTOR: **John DiMaio**
 Signature of Inventor: _____
 Address: **12404 Pierre Blanchet, Montreal, Quebec H1E 4L9, Canada**
 Date: **February 8/95**

FULL NAME OF THIRD/JOINT INVENTOR: Peter Schiller

Signature of Inventor: *Peter Schiller*

Address: 3475 Mountain Street, App. 1212, Montreal, Quebec H3G 2A4, Canada

Date: February 8, 1995

FULL NAME OF FOURTH/JOINT INVENTOR: René Martel

Signature of Inventor: *René Martel*

Address: 1150, Cote Vertu, Saint Laurent, Quebec H4L 1Y5, Canada

Date: Feb 8 / 1995

FOR OFFICIAL USE ONLY

List of Applications on Which the Name of the Assignee Should Be
Changed to AstraZeneca AB

09/159,518

09/254,383

09/254,421

09/308,585

09/254,420

08/776,620

09/043,881

08/718,585

09/159,518
09/254,383
09/254,421
09/308,585
09/254,420
08/776,620
09/043,881
08/718,585

List of Patents on Which the Name of the Assignee Should Be Changed
to AstraZeneca AB

5,756,520

5,968,953

5,912,271

6,031,007

6,034,097

5,670,524

5,834,489

5,856,342

5,961,305

Des. 398,054

5,908,847

5,756,748

6,009,868

5,773,022

5,786,447

5,733,881

5,811,400

5,994,327

5,710,139

FOR PATENT